



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,285	03/16/2004	Jason D. Hanzlik	10423US01	3049

7590 06/19/2006

Attention: Eric D. Levinson  
Imation Corp.  
Legal Affairs  
P.O. Box 64898  
St. Paul, MN 55164-0898

EXAMINER
----------

NGUYEN, JOHN QUOC

ART UNIT	PAPER NUMBER
----------	--------------

3654

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/801,285

Applicant(s)

HANZLIK ET AL.

Examiner

John Q. Nguyen

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Cripps et al (US-6618224), Martini-Vvedensky et al (US-4473665), and Cooper (US-6511010).

Applicant's admitted prior art discussed on pages 1-3 of the specification discloses a data storage tape cartridge with a tape reel. It is deemed that the reel has drive teeth since drive teeth on a reel are old and well known as evidenced by Cripps et al. or, alternatively, the provision of drive teeth on the reel of the admitted prior art as taught by Cripps et al to drive the reel would have been obvious to a person having ordinary skill in the art. What is not disclosed is a tape reel formed of microcellular foam. Cooper discloses a reel having hubs 14 and flanges 12 formed of microcellular foam materials. Martini-Vvedensky et al discloses the desirability of microcellular foam including strength and lightness and discloses microcellular foam materials of polystyrene and polyester, among others, having cell size from 2 to 25 microns. In view of the prior art as a whole, it would have been obvious to a person having ordinary skill in the art to provide the material of the tape reel of the admitted prior art as microcellular foam as taught by Cooper (for applications to winding reels) and Martini-Vvedensky et al (for strength and lightness) to take advantage of the characteristics of such a material including rigidity and lightness. The average total waviness and the radial run-out would have been obvious matters of design choice to a person having ordinary skill in the art based on factors such as preference, design criteria (such as

Art Unit: 3654

required for a particular application), and costs (the ideal situation or goal being zero waviness and radial run-out but which may be cost-prohibitive). The wall thickness of the hub would have been an obvious matter of design choice to a person having ordinary skill in the art based on factors such as preference, design criteria (such as based on the amount and tension of the tape), space optimization (such as depending of cartridge size), and costs.

Applicant's arguments filed 5/16/06 have been fully considered but they are not persuasive.

In response to applicant's argument that Cooper is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Cooper is deemed reasonably pertinent to the particular problem with which the applicant was concerned because the Cooper device is a winding spool for an elongated flexible material analogous to a tape, i.e. it has the same purpose as the claimed invention. It is also deemed that Cooper is in the same field of endeavor as the claimed invention because it also deals with winding a flexible elongated material on a spool/reel.

In summary, Cooper teaches a spool/reel made of microcellular foam material and Martini-Vvedensky et al teaches the advantages of microcellular foam material

including strength and lightness and the particular compositions/characteristics that are being claimed. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art as advanced in the rejection above.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

It should be noted that the rejection does not advance any "reinforcing the hub" as alleged by applicant.

Applicant's arguments regarding "reinforcing the hub", "radial total indicator run-out", and "wall thickness" are made in light of applicant's discussion of the prior art on pages 1-3 of the specification; it is not seen how these arguments are relevant to the applied rejection which includes the patents to Cooper, and Martini-Vvedensky.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

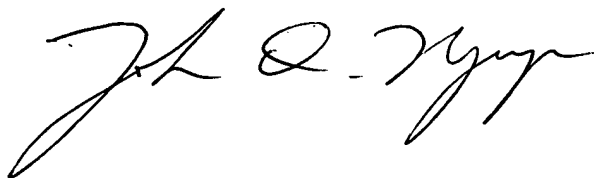
Art Unit: 3654

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Q. Nguyen whose telephone number is (571) 272-6952. The examiner can normally be reached on Monday-Thursday, from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "John Q. Nguyen". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

John Q. Nguyen  
Primary Examiner  
Art Unit 3654